

WHAT IS CLAIMED IS:

1. A printer comprising a recording unit including a print head that prints onto a recording sheet, a carriage that has the print head thereon, a guide mechanism that guides and supports the carriage in a main scanning direction, and a carriage moving mechanism that moves the carriage in the main scanning direction, the recording unit comprising:

a frame that surrounds a scanning range of the carriage in which the print head performs printing onto a recording sheet, the guide mechanism and the carriage moving mechanism attached to the frame, the frame having at least an opening on a top thereof; and

a cover body that is fixed to the frame so as to block a part of the opening of the frame and that has a window that enables a user to have access to a recording sheet within the frame.

2. The printer according to claim 1, further comprising:

an ink cartridge that supplies ink to the print head; and

a cartridge mounting portion that is provided outside the recording unit and to which the ink cartridge is mounted, wherein the recording unit is provided with a flexible ink tube that extends from the ink cartridge to the print head and a fixing portion that fixes a middle of the ink tube, the ink tube gets curved from the fixing portion and extends to the print head, and the window of the cover body is defined such that at least an end portion of the window with respect to the main scanning direction is formed in a round shape similar to a curve in the ink tube approaching the end portion of the window.

3. The printer according to claim 2, wherein the recording unit is provided with a flexible wiring material for transmitting a drive command that extends to the print head, the fixing portion fixes a middle of the flexible wiring material as well as the middle of the ink tube, and the wiring material is disposed such that it gets curved from the fixing portion along the ink tube and extends to the print head.

4. The printer according to claim 3, wherein the wiring material is attached to the ink tube such as to be situated toward a side where the ink tube bends.

5. The printer according to claim 2, wherein the fixing portion is disposed substantially in a central position of the printer with respect to the scanning direction and out of the scanning area of the carriage.

6. The printer according to claim 2, wherein the frame has openings on both ends through which the curved ink tube passes when the carriage is moved to either side of the frame.

7. The printer according to claim 2, wherein a guide portion that guides the ink tube downward when the carriage is moved in the main scanning direction is provided around an edge portion of the window of the cover body.

8. The printer according to claim 6, wherein the guide portion has a shape such that the edge portion of the window of the cover is formed with a slanting portion toward the window and a step continuing from the slanting portion.

9. The printer according to claim 2, wherein the edge portion of the window of the cover body has a shape capable of covering at least an upper part of the fixing portion with the cover body.

10. The printer according to claim 1, wherein the frame includes a front wall that extends along the scanning direction of the carriage and a rear wall provided facing the front wall, and the cover body connects at least the front wall and the rear wall of the frame.

11. The printer according to claim 9, wherein each of the front wall and the rear wall of the frame has an opening through which a recording sheet passes.

12. The printer according to claim 1, wherein the window of the cover body is defined with the edge portion such as to allow access to the print head only when the carriage is in a specified position.

13. The printer according to claim 2, wherein the print head has a plurality of drive portions partitioned off, the ink tube has a plurality of ink tubes that are individually connected with the plurality of the drive portions so as to supply ink separately according to the drive portions, and that project from a side of the print head, the plurality of ink tubes are arranged in the recording unit so as to extend substantially parallel to each other, and provided with a connector that fixedly maintains the parallel arrangement of the plurality of the ink tubes.

14. The printer according to claim 13, wherein each of the plurality of the ink tubes is formed with a color portion that is colored linearly toward an extension direction thereof.

15. The printer according to claim 14, wherein the print head comprises a color head capable of ejecting a plurality of inks of different colors, the color head has a plurality of drive portions partitioned according to the plurality of the inks of different colors, the ink tube comprises a plurality of ink tubes that are separately provided according to the inks and respectively connected to the plurality of the drive portions, and the color portion provided to each of the ink tubes is colored with a corresponding one of the colors of the inks.

16. A printer using liquid ink, comprising:

an electrical controller;
a metal frame having a front wall, a rear wall and a pair of side walls;
a top plate covering an opening defined by the frame, the top plate attached to at least the front wall and the rear wall and having a window opening therein;
a print carriage casing carrying a print head mounted for reciprocal movement within the metal frame;
at least one ink cartridge mounted to the printer outside the metal frame;
at least one ink tube extending between the at least one ink cartridge and the print head; and
at least one flexible printed circuit (FPC) extending between the electrical controller and the print head, wherein the at least one ink tube and the at least one FPC are fixed to the metal frame at entry positions proximate a center of a printing movement range of the carriage.

17. The printer according to claim 16, wherein the window opening is elongated in a printing movement direction with an edge having curved ends, a recess adjacent one end and the rear wall of the metal frame, and a projected portion extending from proximate the front wall to overhang the fixing of the at least one ink tube and the at least one FPC to the frame.

18. The printer according to claim 16, wherein the print head prints in a plurality of colors, the at least one ink tube comprises a plurality of ink tubes providing an ink tube for each print color, and the at least one FPC comprises at least two FPC.

19. The printer according to claim 16, wherein the plurality of ink tubes are divided into two ink tube groups, a first ink tube group extending from a first fixing point to one side of the print head and a second ink tube group extending from a second fixing point to an opposite side of the print head, and a first FPC extending from a third fixing point to the one side of the print head and a second FPC extending from a fourth fixing point to the opposite side of the print head, wherein the first ink tube group and the first FPC are joined and the second ink tube group and the second FPC are joined.

20. The printer according to claim 18, wherein each ink tube has a line extending along a length thereof.